1 Synthetic Drugs

Bath Salts, Spice, and everything else not so nice.

2 Spice - What Is It?

- Spice, or K2, is a synthetic cannabis chemical product that is added to herbal or plant material to be consumed.
- Mimics the effects of Marijuana.
- Is anywhere from 4

to 700 times as potent

as marijuana.

3 Spice - History

- Spice first seen around 2004, marketed in Europe in 2006
- The brands "Spice" and "K2" became the dominant brands of synthetic cannabis, so...
- "Spice" can refer to either the specific brand or to the general category of herbal blends of synthetic cannabis

4 Spice History – con't

- The base of Spice is made up of various plant materials
- Manufacturers claim, and public and law enforcement originally believed that the "high" came solely from this mix of herbs and plants
- Was not until 2008 that synthetic cannabinoids were linked to Spice

5 Ingredients

- Usually medicinal herbs, each with the potential to produce various effects —listed herbs not always present
- Common Ingredients: Baybean, Blue Lotus, Lion's Tail, Lousewort, Indian Warrior, Dwarf Scullcap, Maconha Brava, Pink Lotus, Marshmallow, Red Clover, Rose, Siberian Motherwort, Vanilla and Honey (Varied to Taste/Flavor).

■ More than 100 synthetic cannabinoids

Synthetic Cannabinoids

- Originally developed to research molecular and biochemical effects of cannabinoids in humans
- Most not developed as a drug
- No studies were done, no safety data, unknown effects in humans

7 Synthetic Cannabinoids

- Chemically different from Cannabis
- Binds to the same receptors as Cannabis
- Evidence that the compound binds for a longer duration than Cannabis
- More potent than Cannabis

8 Origins of Synthetic Marijuana

- JWH-018, JWH-073 synthesized at Clemson University by Chemistry Professor John W. Huffman for research in 1995
- CP 47,497 developed by Charles Pfizer pharmaceutical manufacturer in 1980
- HU-210, HU-211 developed at Hebrew University in 1988

9 Words of Wisdom

- According to Professor Huffman regarding spice usage, "People who use it are idiots"
- Compounds commonly found in Spice including JWH-018, JWH-073, JWH-200, etc.

never intended for consumption

■ Of 41 Spice products tested in New Zealand in 2011, 37 had JWH-018

10 The Rise of Spice

- Why Did Spice Become Popular?
 - Initially it was legal In fact, one brand was called "Legal Marijuana"
 - Would not show up on drug tests
 - Marketed towards young adults
 - No age restriction
- 11

12 Brands/Flavors

■ Common Brands:

13 Brands/Flavors

■ Others cont.

14 Brands/Flavors

■ P.E.P Spice stronger than regular spice

15 Expected Observations/ Indicators of Impairment

- Eye Indicators
 - HGN & VGN not present w/ THC, may have w/ spice
 - Lack of convergence
 - Pupil size dilated or possibly normal

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16 Expected Observations/ Indicators of Impairment Spice & Marijuana

- Psychophysical
 - Divided attention impairment
 - Poor coordination and balance
 - Problems with divided attention tasks
 - Slowed internal clock

17 Spice: Intoxicating Effects

- Similar to Marijuana but 4 400 times as potent (Per DPS Crime lab, up to 700 times)
- Duration: initial effects 20-30 min, high reportedly lasts 8-12 hours.

18 General Indicators (both Spice & Marijuana)

- Odor of marijuana/spice
- Impaired perception of time & distance
- Marked reddening of white of eyes
- Body tremors
- Disorientation
- Impaired attention
- Relaxed inhibitions
- Eye lid flutters
- Residue/raised taste buds

19 Spice

- Approx. \$20 \$30/gram
- Varied pricing dependant on quality
- Marijuana street price \$5-\$15/gram

20 Spice/K2 Marijuana/THC

- ☐ Greater chance of addiction/withdrawal
 - Intense paranoia
 - Hallucinations
 - Anxiety
 - Initial effects 5-30 min.
 - Rigid muscle tone
- Less chance of physical addiction
 - Relaxing
 - No hallucinations
 - Increased pulse
 - Initial effects almost immediate
 - Normal muscle tone

21 Legal Issues – Spice and Bath Salts

- The Federal Analogue Act, 21U.S.C Sect. 813, of United States Controlled Substances Act, allows any chemical "substantially similar" to an illegal drug (Schedule I or II) to be treated as Schedule I.
- Must be intended for human consumption.

22 Packaging comments to get around Feds:

- ◆Not for human consumption
- ◆Not for sale in the United States
- ◆Not to be sold to persons under age 18

23 Arizona – Illegal Spice

■ In February 2010, Arizona Governor Jan Brewer signed into law Arizona House Bill 2167, making ten "Spice" compounds illegal under A.R.S. 13-3401. These include JWH-018, JWH-073, JWH-019, JWH-398, JWH-200, JWH-250, JWH-015, CP47,497, CP47,497 C8 homologue and any of their isomers, and HU-210

24 Spice - Federal Ban

- The Feds classified 5 Spice compounds as Schedule I drugs on temporary emergency basis for one year in March, 2011
- Ban was extended another six months
- Federal Synthetic Drug Abuse Prevention Act of 2012, signed July 10

25 Spice - Federal Ban

- Synthetic Drug Abuse Prevention Act of 2012 bans certain classes of synthetic cannabinoids
- List 15 banned compounds specifically
- Bans "cannabimimetic agents" which bind to the cannabinoid receptor
- Bans certain substituted cathinones

26 Spice - Toxicology

■ Currently, no labs in Arizona can test for Spice in blood/urine

- Only two labs in the country able to test biological samples for Spice
- Samples should still be submitted for analysis of other drugs
- DPS can test packaged Spice

27 Trial Considerations

- Negative tox result is expected/consistent
- Impairment DUI
- Call forensic toxicologist?

28 Voir Dire &/or Jury Instructions

- Jurors/family use spice/bath salts
- Should it be legal to drive on Spice/Bath Salts
- Lack of tox results
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29 Evidence-should you go to trial?

- Bad driving
- Signs and symptoms
- Evidence of recent use odor/smoke
- Admissions to use & effects of Spice
- Spice/packaging
- Paraphernalia

30 Associated Paraphernalia

■ The vaporizer pipe

31 Paraphernalia

■ Vapir One v5.0 Vaporizer

32 Paraphernalia

■ Wooden Herb Grinder

Mini 1" Herb Grinder

33 Paraphernalia

■ NEW! Smoke Clear Transparent Blunt Papers

34 Bath Salts

35 Bath Salts – Where do they come from?

- Bath salts are a synthetic cathinone
- Cathinone is a banned stimulant which is derived from the plant Khat

36 Bath Salts Chemical Names

37 Bath Salts - History

- First synthesized in 1929
- Re-synthesized by underground chemist in 2003
- Available for purchase on internet in 2007
- In 2008 came to attention of international law enforcement, to DEA in US in 2009

38 What is it?

- 1 Forms
- 2 Crystal
 - Powder

- Capsules
- Pills
- 3 How Ingested
- ⁴ Oral
 - Inhaled
 - Snorted
 - Injected
 - Smoked
 - Other

39

40 Bath Salts

- Synthetic drug mimics effects of cocaine/crack, meth & ecstasy
- Highly addictive intense cravings & uncontrollable urges for more
- Causing deaths brain damage, heart attacks, hallucinations, self mutilations, suicidal tendencies even after effects gone
- Sold on-line/smoke shops \$30 small package

41 Bath Salts/Ivory Wave

- Also called
 - Plant food
 - Cat food
 - Vanilla Sky
 - White Lighting
 - Fly
 - Snow
 - Ivory
 - Charge

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- Ivory Coast
- Purple Wave Cristalius
- Magic
- Ocean Blue

42 Effects of Bath Salts, Spice

43 Effects of Bath Salts, Spice

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45 Symptoms of Bath Salts

- Bath salts are classified as a stimulant
- No HGN or VGN
- Increased blood pressure, heart rate
- Dilated pupils
- Increased body temperature
- Rigid muscle tone

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47 General Indicators

- Anxiety
 - Body tremors

- Dry mouth
- Euphoria
- Exaggerated reflexes
- Excited
- Bruxism
- Inappropriate laughter
- Increased alertness
 - Insomnia
 - Irritability
 - Loss of appetite
 - Redness to nasal area
 - Restlessness
 - Runny nose
 - Talkative
 - Paranoia

48 Other Synthetic Drugs

- Krokodil (Desomorphine) Synthetic Opiate
- Named from the effect it has on user's skin, turning it scaly, cracked, and green like a crocodile
- Made easily from codeine, which is available OTC in Russia

49 Krokodil

- Much cheaper than Heroine, 8-10 times more potent than Morphine
- High does not last as long as Heroine
- Can be "cooked" in as little as 30 minutes
- Highly addictive, hard to withdraw from

50 The 2-C's

- Psychedelic drugs big in rave scene
- 2C-B 'Rusko', 'Spectrum', 'Venus', 'B's', 'CB's', 'Nexus'
- 2C-E March, 2011 eleven teenagers overdosed, with one fatality
- 2C-I 'Smiles', increasing popularity
- Others, similar to Ecstasy effects

51 Inherent Dangers

- Designer drugs appeal to young adults
- Described as "party powders"
- Bought online from unknown sources, typically overseas
- Concocted by inexperienced, "hobby" chemists, unknown compounds, strengths, impurities, mislabeling, etc.

52 Prosecution

With toxicological results:

Same as any other DUI drugs, with explanation, education of bath salts Crime lab can test for some compounds

Without results:

Review the evidence and strength of your case

53 Prescription Drug Impairment

■ DUI Drug cases are on the rise

- 2007 NHTSA National Roadside Survey
 - Weekend nighttime drivers
 - ■Prevalence of alcohol 12.3%
 - ■Prevalence of drugs 16.4%
 - Weekend daytime drivers
 - ■Illegal drugs 5.8%
 - ■Medications 4.8%

54 DUI Drug Arrests in AZ

- In Arizona, the number of DUI arrests dropped more than 13% in 2012 from 2011, while the number of DUI drug arrests increased 12%
- Percentage of DUI Drug arrests:
 - -2011 11%
 - -2012 14%
- DUI Drug arrests increased 18 fold from 2003 to 2012 Per GOHS

55 Why are there more DUI Drug arrests?

- Better Detection
- More prescription drugs on the market
- More people being prescribed meds
- Meds are stronger
- People take more meds when their tolerance increases

56 2012 AZ East Valley Holiday DUI Task Force

- One out of three DUI arrests was drug related
- Mesa PD arrested 540 DUI suspects, with 344 arrests for DUI drugs, or 64% of all DUI arrests!

57 Not your Parent's Prescription Drugs

- More and stronger prescriptions
 - Hydrocodone, oxycodone products prescribed increased over FOUR TIMES from 40 million in 1991 to 180 million in 2007
 - Morphine Rx increased 600% from 1997-2007
 - Accidental prescription overdose kills more Americans than car crashes
 - Kills more than crack, meth & heroine combined
 - -80% of pain meds consumed by US

Why are Prescription DUI's viewed differently than Alcohol or Illegal Drug DUI's?

- Doctor prescribed, so must be OK
- Medically necessary I have to take my medications
- Unlike illegal drugs, meds are good for you
- Almost everyone has been prescribed meds in the past
- Lack of understanding of effects

59 Why are Prescription DUI's viewed differently than Alcohol or Illegal Drug DUI's?

- We have all be taught the dangers of drinking alcohol and driving
- We have all been taught drugs are bad "Just say no!"
- No such concerted campaign against prescription drug impairment and driving

60 DUI Law in Arizona

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62 Ability to Drive"

- A jury instruction requiring proof that a defendant's ability to drive was impaired is invalid.
- The State does not need to offer any evidence of bad driving, only that the defendant was impaired.
 - State v. Miller, 226 Ariz. 190

63 Per se DUI Drugs

28-1381(A)(3)

- Drive or be in actual physical control
- of a vehicle
- in this state
- while there is any drug defined in 13-3401 or its metabolite in the person's body. Use if prescription-type drug used without a prescription or used not as prescribed

64 Prescriptions

- 28-1381(D)
 - Must take prescription as prescribed
 - Before the statute was amended-"using a drug prescribed by a doctor"
 - Investigate validity
 - Side effects, even with prescribed dose

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65 DUI Drugs

28-1381(A)(3)

■ Impairment is <u>NOT</u> required if not used as prescribed!

66 Prescription Drug Defense

28-1381(D)

- Only potential defense to (A)(3) charge
- Not a defense to (A)(1)
 - ARS 28-1381(B)
- Must be valid on DOV
- Must be U.S. doctor

67 Prescription -Affirmative Defense

 \blacksquare 28-1381(D) is an affirmative defense.

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68 Valid Prescriptions

- Get a copy
 - Prescribed dosage vs. amount, manner taken
 - Investigate validity
- Evidence defendant is abusing the drug ("as prescribed")?
- Consult with toxicologists

69 Case Preparation

- Educate yourself- PDR, Internet (remember, everything on the internet is true), toxicologist, DRE Officer
- Need to know what your toxicologist is willing to say at trial

70 Let's Get Ready for Trial

Jury Selection

■ More like jury de-selection

- Need to weed out unfavorable jurors
- Get assurances from jurors that will help you later

71 Voir Dire

- In Maricopa County 68% of jurors have either been arrested, convicted or know someone close with a DUI
- Strong negative feelings against the State of Arizona is reported in 30% of those cases

2006-2011 Paula Anderson, Anderson & Associates Research Services, Inc.

72 Voir Dire sample questions

- "Does anyone have strong feelings about the police, criminal justice system, prosecuting prescription drug DUI", etc
- Does anyone feel that the warnings on prescriptions re: driving are exaggerated or unnecessary?
- Would anyone have difficulty convicting someone of DUI is the substance that was impairing the driver was a prescription?

73 Evaluating Potential Jurors

- Generational differences, similarities
 - Younger generation ADD, Ritalin, Adderall, etc.
 - Look for attitude, clothing, gestures
 - Older generation Five out of six people over sixty-five take at least one medication, and almost half take three or more

CDC, Health US 2004

74 Opening Statement

- Educate Impairing prescriptions as bad as alcohol
- Get assurances Wouldn't ignore feelings of impairment by alcohol, why ignore prescriptions?
- Can be impaired by prescribed dose, reason for warnings
- Tell them what every criminalist unable to say defendant impaired by meds

75 **During Trial**

- Use Officers, DRE's, witnesses they recognized something was wrong
- The officer's testimony is the link between the signs and symptoms of impairment and toxicological evidence
- Officer proves impairment

76 What Do The Numbers Mean?

- For vast majority of drugs, no direct correlation of blood drug concentrations with degree of impairment currently exists.
- There is no "legal limit" so must look at signs of impairment bring this out

77 Direct Examination of a Toxicologist

- Establish chain of custody
- Use expert to strengthen other parts of case (stop, roadside FSTs, etc.)
- Tie the drugs found to the impairment observed at all stages of the case
- Anticipate defenses/defense expert

78 How Crime Lab Can Help Prove Abusing the Drug

79 Medical Marijuana in AZ

Not a defense to 28-1381(A)(1)

- * A.R.S. § 36-2082
- * A.R.S. § 28-1381(B)

Not a Defense to 28-1381(A)(3)

* Written Certificate does not = prescription

80 Defense Expert – Get Concessions

- Would you agree:
 - Some drugs are only available by prescription because higher potential for abuse? Controlled because strength of drug?
 - Warning on label re: driving because even prescribed dose can impair?
 - More than one drug would almost certainly increase chance of impairment?

81 Final Thoughts

- Reminds jurors what they have learned doesn't matter what substance is impairing them, alcohol, illegal drugs or prescription drugs
- Can't ignore alcohol impairment prior to driving
- And can't ignore Rx impairment
- Remember DUI prescription drug impairment same as alcohol, impaired is impaired. Need to overcome juror's perceptions that it is different.

82 Questions?

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